



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

Form Approved OMB No. 2070-0060



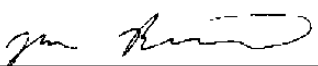
M-477262-02-1

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 1 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
Product Specific Data – BES0668 Insecticide (DDCT No. D-009821)						
EFFICACY						
810.3400	Vandock, K. (2013); A summary of laboratory and field efficacy trials for BES0668 Insecticide against important public health pests; Bayer Environmental Science, RTP, NC, Study No. US0377, DART Reference No. M-463444-02-1; 11 pages	49114101	432	OWN	US0377 / M-463444-02-1	
810.3400	Zhai, J. (2013); Field GLP study to determine efficacy, droplet spectrum, spray drift and deposition of Patriot adulticide using ground ULV sprayer against <i>Aedes aegypti</i> mosquitoes in Florida; Eurofins Agroscience Services, Mebane, NC, Study No. S11-00013, 207 pages	49114102	432	OWN	S11-00013 / M-465171-01-1	
810.3400	Zhai, J. (2013); Field GLP study to determine efficacy, droplet spectrum, spray drift and deposition of Patriot adulticide using ground ULV sprayer against <i>Aedes sollicitans</i> mosquitoes in Texas; Eurofins Agroscience Services, Mebane, NC, Study No. S11-00014, 218 pages	49114103	432	OWN	S11-00014 / M-465233-01-1	
810.3400	Zhai, J. (2013); Field GLP study to determine efficacy, droplet spectrum, spray drift and deposition of Patriot adulticide using ground ULV sprayer against <i>Aedes</i> sp. and <i>Culex</i> sp. mosquitoes in California; Eurofins Agroscience Services, Mebane, NC, Study No. S11-00015, 199 pages	49114104	432	OWN	S11-00015 / M-465239-01-1	
810.3400	Zhai, J. (2013); Field GLP study to determine efficacy, droplet spectrum, spray drift and deposition of Patriot adulticide using ground ULV sprayer against <i>Anopheles</i> sp. and <i>Culex</i> sp. mosquitoes in North Carolina; Eurofins Agroscience Services, Mebane, NC, Study No. S11-00016, 208 pages	49114105	432	OWN	S11-00016 / M-465687-01-1	
810.3400	Zhai, J. (2013); Field demonstration study to determine efficacy of Patriot adulticide using ground ULV sprayer against field-collected <i>Culex quinquefasciatus</i> mosquitoes in Louisiana; Eurofins Agroscience Services, Mebane, NC, Study No. S12-03042, 23 pages	49114106	432	OWN	S12-03042 / M-465250-01-1	
810.3400	Zhai, J. (2013); Field GLP studies to determine efficacy of Patriot adulticide using ground ULV sprayer against fly species in North Carolina; Eurofins Agroscience Services, Mebane, NC, Study No. S12-00017, 114 pages	49114107	432	OWN	S12-00017 / M-465246-01-1	
810.3400	Chaskopoulou, A. (2014); Efficacy of ground ultra-low volume applications with a novel water-based formulation of an unsynergized pyrethroid against <i>Phelobotomine</i> Sand flies.; USDA-ARS European Biological Control Laboratory, Thessaloniki, Greece, Report ID US0404, 6 pages.	49280801	432	OWN	US0404 / M-476971-01-1	
PRODUCT CHEMISTRY						

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.		Agency
Internal Use Copy		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 2 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
830 Series	Baker, B. (2013); Product Chemistry of BES 0668 Insecticide; Bayer CropScience, KC, MO, Brochure No. 2730; DART Reference No. M-463440-01-1; 31 pages + 126 page Confidential Appendix	49114108	432	OWN	BR 2730 / M-463440-01-1	
ENVIRONMENTAL FATE						
835.6200	Xu, T., et al (2011); Deltamethrin – Aquatic Field Dissipation Study Waiver Request; Bayer CropScience, RTP, NC; Report No. US0176; DART Reference No. M-408146-01-1; 75 pages	49114110	432	WAIV	US0176 / M-408146-01-1	
835.SUPP	Perez-Ovilla, et al, (2013); Environmental Fate, Ecological and Drinking Water Exposure Assessment for Deltamethrin Use as Adulticide; Bayer CropScience, RTP, NC; Report No. MEDAY003; DART Reference No. M-461870-01-1; 41 pages	49114111	432	OWN	MEDAY003 / M-461870-01-1	
RESIDUE CHEMISTRY						
860.1500	Krolski, M. (2013); Deltamethrin - Magnitude of the Residue in/on Alfalfa, Leaf Lettuce, and Grass following Ultra Low Volume (ULV) Spray for Mosquito Control, Bayer CropScience, RTP, NC; Study No. RADAN008, 788 pages.	49114112	432	OWN	RADAN008 / M-462353-01-1	
TOXICOLOGY						
870.1100	Merrill, D. (2013); BES 0668 Insecticide: Acute Oral Toxicity Up And Down Procedure in Rats, Product Safety Laboratories, Lab Study Nr. 36669, 17 pages	49114113	432	OWN	36669 / M-461371-01-1	
870.1200	Merrill, (2013); BES 0668 Insecticide: Acute Dermal Toxicity Study in Rats - Limit Test, Product Safety Laboratories, Lab Study Nr. 36670, 15 pages	49114114	432	OWN	36670 / M-461375-01-1	
870.1300	Merrill, D. (2013); BES 0668 Insecticide: Acute Inhalation Toxicity Study in Rats - Limit Test, Product Safety Laboratories, Lab Study Nr. 36671, 23 pages	49114115	432	OWN	36671 / M-461389-01-1	
870.2400	Merrill, D. (2013); BES 0668 Insecticide: Primary Eye Irritation Study in Rabbits, Product Safety Laboratories, Lab Study Nr. 36672, 15 pages	49114116	432	OWN	36672 / M-461608-01-1	
870.2500	Merrill, D. (2013); BES 0668 Insecticide: Primary Skin Irritation Study in Rabbits, Eurofins / Product Safety Laboratories, Lab Study Nr. 36673, 15 pages	49114117	432	OWN	36673 / M-461612-01-1	
870.2600	Merrill, D. (2013); BES 0668 Insecticide: Local Lymph Node Assay (LLNA) in Mice, Eurofins / Product Safety Laboratories, Lab Study Nr. 36674, 25 pages	49114118	432	OWN	36674 / M-461616-01-1	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX


Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 3 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
REDUCED RISK RATIONALE						
SUPP	Sheets, L., et al (2013); Reduced Risk Rationale for the Use of Deltamethrin in Wide Area Mosquito Control for Application by Commercial Applicators (Part I); Bayer CropScience, RTP, NC, Report No. US0356, 132 pages.	49114119	432	OWN	US0356 / M-465815-01-1	
SUPP	Morrison, G., et al (2013); Resistance Management, Comparative Performance, and Market Analysis for BES0668 Insecticide; Reduced Risk Rationale for the Use of Deltamethrin in Wide Area Mosquito Control for Application by Commercial Applicators (Part II); Bayer CropScience, RTP, NC, Report No. US0357, 14 p. with 23 p. Confidential Appendix.	49114120	432	OWN	US0357 / M-465868-01-1	
SUPP	Brill, J., et al; (2013); Request for Establishment of a New Exclusive Use Period Associated with Registration of New Public Health Use of Deltamethrin as Provided for Under FIFRA § 3(c)(1)(F)(vi); Bayer CropScience LP; Report No. US0379; 27 pages, with 7 page confidential appendix	49114121	432	OWN	US0379 / M-465821-01-1	
SUPP	Brill, J., et al; (2013); Petition for Establishment of a Tolerance for use of Deltamethrin as a Wide Area Mosquito Control Insecticide over the following Domestic Terrestrial Food and Feed Crops: All Crop Tolerance (All Raw Agricultural Commodities); Bayer CropScience LP; Petition Number PP-??????; DART Reference No. M-465822-01-1; 95 p.	49114122	432	OWN	M-465822-01-1	

ACTIVE INGREDIENT (DELTAMETHRIN) CITATIONS

Product Chemistry, Section 158.310

61 Series (830 series)	Grelet, D. (1990) Deltamethrin-Active Ingredient: Product Identity and Composition: Lab Project Number: STE-009-A-05-1. Unpublished study prepared by Roussel Uclaf. 20 p.	41651001	264	OWN	STE-009-A-05-1	
62 Series (830 Series)	Grelet, D.; Climeau, M. (1990) Deltamethrin-Active Ingredient: Analysis and Certification of Product Ingredients: Lab Project Number: STE-009-A-05-1. Unpublished study prepared by Roussel Uclaf. 36 p.	41651002	264	OWN	STE-009-A-05-1	
61 & 62 Series (830 Series)	Fontaine, L. (2003) Product Chemistry of Deltamethrin Technical. Project Number:. Unpublished study prepared by Bayer Corp and Aventis Pharma Deutschland GmbH. 77 p.	46151601	264	OWN	BR/2310, C017750, PA01/049	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

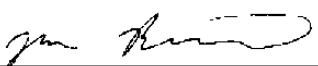
Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014		EPA Reg. No.: 432-RLGU	Page 4 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709		Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]			

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
61 & 62 Series (830 Series)	Fontaine, L.(2004) Supplement to MRID 46151601 – Product Chemistry of Deltamethrin Technical Code AEF032640	46288901	264	OWN		
63-2, 63-3, 63-4, 63-7 & 63-12	Thomas, E.; Sweetapple, G. (1990) Deltamethrin-Active Ingredient: Determination of Color, Physical State, Odor, Density and pH: Lab Project Number: 4048-89-0230-AS. Unpublished study prepared by Ricerca, Inc. 29 p.	41651004	264	OWN	4048-89-0230-AS	
830.7200	Sweetapple, G. (1990) Deltamethrin-Active Ingredient: Determination of Melting Point: Lab Project Nr: 4048-90-0147-AS. Unpublished study prepared by Ricerca, Inc. 25 p.	41651005	264	OWN	4048-90-0147-AS	
63 Series (830 Series)	Grelet, D. (1990) Deltamethrin-Active Ingredient: Summary of Physical and Chemical Characteristics: Lab Project Number: STE-009-A-05-1. Unpublished study prepared by Roussel Uclaf. 15 p.	41651003	264	OWN	STE-009-A-05-1	
830.7840 830.6319	Yoder, S. (1990) Deltamethrin A.I.--Determination of Solubility in Water, n-Octanol, and Xylenes: Lab Project No: 4048-90-0153-AS-001. Unpublished study prepared by Ricerca, Inc. 124 p.	42137501	264	OWN	4048-90-0153-AS-001	
830.7950	Yoder, S. (1991) Deltamethrin A.I.--Determination of Vapor Pressure Lab Project Number: 4048-90-0151-AS-001. Unpublished study prepared by Ricerca, Inc. 72 p.	42137502	264	OWN	4048-90-0151-AS-001	
830.7560	Yoder, S. (1991) Deltamethrin A. I.--Determination of Octanol/Water Partition Coefficient: Lab Project Number: 4048-90-0154-AS-001. Unpublished study prepared by Ricerca, Inc. 74 p.	42114802	264	OWN	4048-90-0154-AS-001	
830.6313	Sanders, J. (1991) Deltamethrin A. I.--Determination of Stability: Lab Project Number: 4048-90-0158-AS-001. Unpublished study prepared by Ricerca, Inc. 69 p.	42114803	264	OWN	4048-90-0158-AS-001	
830.6317	Yoder, S. (1991) Deltamethrin A.I.--Determination of Storage Stability: Interim Report: Accelerated Study: Lab Project Number:.. Unpublished study prepared by Ricerca, Inc. 46 p.	42137503	264	OWN	4048-90-0152-AS-001	
830.6320	Kerestman, S. (1991) Deltamethrin A. I.--Determination of Corrosion Characteristics: Lab Project Number: 4048-90-0146-AS-001. Unpublished study prepared by Ricerca, Inc. 36 p.	42114804	264	OWN	4048-90-0146-AS-001	
63 Series (830 Series)	Dorr, V. (1991) Summary of Product Chemistry Data Requirements for Deltamethrin Active Ingredient and Decis 2.5EC (Code IS-002A) Insecticide. Unpub. study prepared by Hoechst-Roussel Agri-Vet Co. 12 p.	42114801	264	OWN	Code IS-002A	
830.7050	Maurer, T (2000): Determination of the Quantum Yield of Direct Photolysis in Aqueous Solution. Bayer CropScience Report M-197547-0 1-2	48218201	264	OWN	M-197547-0 1-2	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.		Agency
Internal Use Copy		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

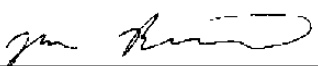
Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 5 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
830.7570	Wiche, A. et al (2012); Deltamethrin (AE F032640), pure substance: Partition coefficient 1-octanol / water (HPLC method), OPPTS 830.7570, Bayer CropScience AG, Frankfurt am Main, Germany, Laboratory Project ID PA10/070 (M-437011-01-1), 22 pages	49058502	264	OWN	M-437011-01-1 / Submitted to PRD on 2/15/13. Contact is Joel Wolf.	
Environmental Fate, Section 158.1300						
835 Series	Erstfeld, K. (1990) Summary of Selected Environmental Fate Data for Deltamethrin. Unpublished study prepared by Roussel Uclaf. 11 p.	41651037	264	OWN		
835 Series	Erstfeld, K.; Mayasich, J.; O'Grodnick, J. (1991) Environmental Fate Summary for Deltamethrin. Unpublished study prepared by Hoechst-Roussel Agri-Vet Co. 17 p.	42114817	264	OWN		
835.1230	Smith, A. (1990) Determination of the Adsorption & Desorption Coefficients of Deltamethrin: Lab Project Number: 90-4-3311: 1719 0190 6129 710. Unpublished study prepared by Springborn Labs, Inc. 44 p.	41651039	264	OWN		
835.1230	Wang, W. (1991) Adsorption and Desorption of [Carbon 14]-Br2CA in Five Soils: Lab Project Number: XBL 91061: RPT0076. Unpublished study prepared by Xenobiotic Laboratories Inc. 73 p.	42475908	264	OWN		
835.1230	Christensen, K. (1993) Deltamethrin-Determination of the Sorption and Desorption Properties: Lab Project Number: 1719. 0393.6232.710: 93-8-4912. Unpublished study prepared by Springborn Labs, Inc. 76 p.	42976501	264	OWN		
835.1230	Wang, W. (1991) Adsorption and Desorption of [Carbon 14]-Br2CA in Five Soils: Lab Project Number: XBL 91061: RPT0076. Unpublished study prepared by Xenobiotic Laboratories Inc. 73 p.	42475908	264	OWN		
835.1230	Reynolds, J. (1992) Deltamethrin: Adsorption and Desorption of (carbon)-14-m-Phenoxybenzoic Acid in Four Soils: Lab Project Number: 92022: RPT00109: A71037. Unpublished study prepared by Xenobiotic Labs., Inc. 63 p.	44977006	264	OWN		
835.1240	Kaufman, D.; Russell, B.; Helling, C. et al. (1981) Movement of cypermethrin, decamethrin, permethrin, and their degradation products in soil. Journal of Agricultural and Food Chemistry 29(2):239-245.	42475907	264	OWN		
835.1240	Kaufman, D.D.; Russell, B.A.; Helling, C.S.; et al. (1978) Movement of Decamethrin, Cypermethrin, Permethrin and Their Degradation Products in Soil. (Unpub. study received Nov 13, 1980 under 8340-EX-6; prepared by U.S.D.A., Agricultural Environmental Quality Institute, Pesticide Degradation Laboratory and Univ. of Md, Botany Dept., submitted by American Hoechst Corp., Somerville, N.J.; CDL:099744-H)	00058861	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.		Agency
Internal Use Copy		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 6 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
835.2120	Smith, A. (1990) Determination of Aqueous Hydrolysis Rate Constant and Half-Life of Deltamethrin: Lab Project Number: SLI 90-4-3310: 1719 0190 6128 715. Unpublished study prepared by Springborn Laboratories, Inc. 57 p.	41651038	264	OWN		
835.2240	Bowman, B.; Carpenter, M. (1987) Determination of Photodegradation of [Carbon 14]-Deltamethrin in Aqueous Solution: ABC Final #35491. Unpub. study prepared by Analytical Bio-Chemistry Labs, Inc. 53 p.	40254101	264	OWN		
835-2240	Wang, W.; Reynolds, J. (1991) Aqueous Photolysis of Carbon 14 Deltamethrin: Lab Project Number: RPT0065: XBL 90035. Unpublished study prepared by XenoBiotic Labs, Inc. 81 p.	42114818	264	OWN		
835.2410	Wang, W.; Reynolds, J. (1991) Soil Photolysis of Carbon 14 Deltamethrin: Lab Project Number: RPT 0064: XBL 90034. Unpublished study prepared by XenoBiotic Labs, Inc. 84 p.	42114819	264	OWN		
835.4100	Kaufman, D.; Kayser, A.; Russell, B. et al. (1990) Degradation of Carbon-14 ³ -phenoxy and Carbon-14 ³ -cyano-Decamethrin in Soil. Unpublished study prepared by USDA, AEQI/SEA-AR/BARC-West. 29 p.	41677404	264	OWN		
835.4100	Wang, W. (1991) Aerobic Soil Metabolism of Carbon 14 Deltamethrin: Lab Project Number: RPT 0050: XBL 89097. Unpublished study prepared by XenoBiotic Labs, Inc. 109 p.	42114820	264	OWN		
835.4100	Kaufman, D.; Kayser, A.; Russell, B. (1990) The Effect of Soil Temp. on the Degradation of Carbon-14 ³ -cyano-Decamethrin in Soil. Unpub. study prepared by USDA AEQI/SEA-AR/BARC West. 20 p.	41677405	264	OWN		
835.4200	Wang, W. (1991) Anaerobic Metabolism of Carbon 14 Deltamethrin: Lab project Number: RPT 0051: XBL 89098. Unpublished study prepared by XenoBiotic Labs, Inc. 114 p.	42114821	264	OWN		
835.4300	Hellpointner, E. (2012); [gem-dimethyl-14C]Deltamethrin: Aerobic Aquatic Metabolism, OPPTS 835.4300, Bayer CropScience AG, Monheim, Germany, Study Number M1511924-3, 141 pages	48988201	264	OWN	M-434820-01-1 / MEDAL007 / M1511924-3 / Submitted to PRD (Joel Wolf) on 11/05/12	
835.4400	Mislankar, S. (2013); [Benzyl-14C]Deltamethrin and [Gem-dimethyl-14C]Deltamethrin: Anaerobic Aquatic Metabolism in Two Water/Sediment Systems, OPPTS 835.4400, Bayer CropScience RTP, NC, USA, Study Number M-455264-01-1; 127 pages.	49114109	432	OWN	M-455264-01-1 / MEDAL038 / Submitted to RD as part of 432-1534 dossier	
835.4300 & 835.4400	Muttzall, P. (1993) Deltamethrin: Water/Sediment Biodegradation of (benzyl-(carbon-14)) Deltamethrin: Lab Project Number: MTB-90-0057-01: A50953. Unpublished study prepared by AgrEvo USA Co. 60 p.	44977005	264	OWN	Supplemental	
835.6100	Brumbard, B (2005): Analytical method 00877 for the determination of total residues of Deltamethrin (AE F032640) in/on soil and sediment by HPLC-MS/MS. Bayer CropScience Report M-246580-02-2	48218202	264	OWN	M-246580-02-2	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

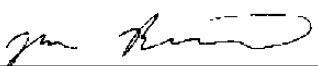
Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 7 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
835.6100	Mayasich, J.; Czarnecki, J. (1991) Determination of the Dissipation and Mobility of alpha-R, cis-and trans-Deltamethrin, and Br 2 CA Residues in a Minnesota Cornfield: Lab Project Number: 89-1815: 89-0063. Unpublished study prepared by Agri-Growth Research, Inc. and En-Cas Analytical Labs. 36 p.	42114822	264	OWN		
835.6100	Mayasich, J.; Czarnecki, J. (1991) Determination of the Dissipation and Mobility of alpha-R-, cis-and trans-deltamethrin, and Br2CA Residues in Louisiana Cotton Field: Lab Proj. ID: 89/0064 HOE: JAC1989047. Unpub. study prepared by EN-CAS Analytical Labs., in cooperation with Jensen Ag. Consult, Inc. 459 p.	42137505	264	OWN		
835.6100	Grigor, A.; McDonell, J. (1993) Deltamethrin: Field Dissipation Study in Cotton and Bareground in California: Lab Project Number: HRAV 90-0090: 90-0091: 90-0090. Unpublished study prepared by ChemAlysis Inc. and Research for Hire. 537 p.	42773903	264	OWN		
835.6200	Krebber, R.; Braune, M. (2007): Modification M001 of analytical method 00886 for the determination of total residues of deltamethrin (AE F032640) in surface water by HPLC-MS/MS. Bayer CropScience report M-291746-01-2	48218203	264	OWN	M-291746-01-2	
835.6200	Krebber, R.; Braune, M. (2007): Modification M001 of analytical method 00886 for the determination of total residues of deltamethrin (AE F032640) in surface water by HPLC-MS/MS. Bayer CropScience Report M-291746-01-2	48218203	264	OWN	M-291746-01-2	
835.6200	Fackler, P. (1991) Tralomethrin and Deltamethrin: Comparative Environmental Fate During an Aquatic Microcosm Test: Unpub. study prepared by Springborn Labs, Inc. 36 p.	42114816	264	OWN	Lab Project Nr: 90-10-3506: 1719.0590.6132.310	
835.6200	Fackler, P. (1991) Tralomethrin and Deltamethrin--Comparative Environmental Fate During an Aquatic Microcosm Test: Lab Project Number: 90-10-3506: 1719.0590.6132.310. Unpublished study prepared by Springborn Labs., Inc. 264 p.	42773904	264	OWN		
835.SUPP SS-1091	Cleary, J.; McGrath, J. (2009) Modeling the Fate of Pyrethroids through Suffern, NY Wastewater Treatment Plant. Project Number: PYWG/001/002. Unpublished study prepared by Hydroqual, Inc. 53 p.	48072901	64977	OWN	PYWG/001/002	
835.SUPP SS-1091	Cleary, J. (2012) Laboratory Investigation of the Fate of Pyrethroid Insecticides in Wastewater Treatment Processes. Project Number: PYWG/153304/005. Unpublished study prepared by Hydroqual, Inc. 103p.	48762906	64977	OWN	PYWG/153304/005	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.		Agency
Internal Use Copy		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 8 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
835.SUPP SS-1091	Markle, J. (2012) Analysis of Pyrethroids in the Influent, Effluent and Receiving Water Body from a Publicly-Owned Treatment Works (POTW) in Sacramento County, California. Project Number: PWG/2012/001. Unpublished study prepared by Morse Laboratories, Inc. and University of California, Riverside. 12p.	48857503	64977	OWN	PWG/2012/001	
835.SUPP SS-1091	Cleary, J.; McGrath, J. (2012) Modeling the Fate of Pyrethroids through Sacramento County Regional Wastewater Treatment Facility, Elk Grove, CA. Project Number: PYWG/153562. Unpublished study prepared by Hydroqual, Inc. 47p.	48857505	64977	OWN	PYWG/153562	
Ecological Effects, Section 158.630						
850 Series	Dulak, L. ; Erstfeld, K. ; Mayasich, J. (1991) Summary of Ecological Effects Data on Deltamethrin Technical Active Ingredient and Decis 2.5EC Insecticide. Unpublished study prepared by Hoechst-Roussel Agri Vet Co. 20 p.	42114807	264	OWN		
850 Series	Solomon, K. (1997) Review of the Laboratory Aquatic Organism Toxicity Data for the Cotton Pyrethroids: Distributional Analysis of the Acute Toxicity Data. Unpub. study prepared by University of Guelph. 76 p.	44396501	264	OWN		
850 Series	Fischer, R. (1993) HR 20900 Aquatic Toxicity Data (Summary). Unpublished study prepared by Houchst-Roussel Agri-vet Co. 6p.	43073902	264	OWN	HR 20900	
850 Series	Mayasich, J. (1990) Summary of Aquatic Toxicity of Deltamethrin Technical A.I. and IS-002A (Formulated Deltamethrin). Unpublished study prepared by Roussel Uclaf. 11 p.	41651011	264	OWN		
850 Series	Ritter, A.; Williams, W. (2003); Tier 2 Modeling of Pyrethroid Compounds Exposure to Aquatic Nontarget Organisms Associated with Use on Cotton: Final Report. Project Number: WEI/794/03. Unpublished study prepared by Waterborne Environmental, Inc. (WEI). 180 p.	46051301	264	OWN		
850.1010	Putt, A. (1999) Deltamethrin ((14-carbon)-labeled)--Acute Toxicity to Daphnids (Daphnia magna) Under Flow-Through Conditions: Lab Project Number: C003959: 10824.6141: 031799/OECD/FT-DAPHNIA/AGREVO. Unpublished study prepared by Springborn Laboratories, Inc. 59 p. Relates to L0000453.	44928701	264	OWN		Comment from ReReg Docs; Supplemental because NOAEC not established.
850.1010	Sowig, P.; et al, (2001); Acute toxicity to Daphnia magna (Waterflea) AE F108565 (Metabolite of deltamethrin) substance, pure. Code: AEF108565 00 1B99 0001; Aventis CropScience GmbH, Frankfurt am Main, Germany; Report No.: CO10889; Document No.: M-199793-01-2; 34 p.	48218205	264	OWN		M-199793-01-2

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 9 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.1010	Bruns, E. (2009); Acute toxicity of deltamethrin EC 25AF G (Decis FLUXX) to the water flea Daphnia magna in a static renewal laboratory test system; Bayer CropScience AG, Monheim, Germany; Report Number: EBIDX030; M-327201-01-2, 71 p.	48218204	264	OWN	EBIDX030; M-327201-01-2 / TEP	
850.1010	Bettencourt, M. (1993) HR 20900--Acute Toxicity to Daphnids (Daphnia magna) Under Flow-through Conditions: Lab Project Number: 1719.1092.6215.115: 93-3-4658. Unpublished study prepared by Springborn Labs, Inc. 70 p.	43073905	264	OWN		
850.1010	McNamara, P. (1990) Acute Toxicity of Decis 2.5 EC (IS-002A) to Daphnids (Daphnia magna) During a 48-Hour Static Renewal Exposure: Lab Project Number: 90-6-3344: 1719.0789.6114.115: 90-0116. Unpublished study prepared by Springborn Laboratories, Inc. 54 p.	41651014	264	OWN	TEP	
850.1020	Bradley, M.J. (2013) Deltamethrin - Acute Toxicity to Freshwater Amphipods (Hyaletta azteca) Under Flow-Through Conditions; Lab Project ID 13656.6170; Unpublished study prepared by Smithers Viscient Laboratories, Wareham, MA; 49 p.	49191301	64977	OWN	13656.6170 / Submitted by PWG	
850.1020	Putt, A. (2000) Decis EC 25 g/L--Acute Toxicity to Gammarids (Gammarus fasciatus) under Flow-Through Conditions: Lab Project Number: 10824.6150: C006608. Unpublished study prepared by Springborn Labs., Inc. 55 p. {OPPTS 850.1020} Relates to L0000519.	45048601	264	OWN	TEP	
850.1020	Putt, A. E. (2000); Acute toxicity to Gammarids (Gammarus fasciatus) in a sediment-water system Decis EC 25 g/L Code: AE F032640 00 EC03 B003;Springbom Laboratories, Inc., Wareham, MA, USA; Report No.: C009363 ; Document No.: M-198400-01-3; 91 p.	48258206	264	OWN	M-198400-01-3 / TEP	
850.1020	Gries, T., et al, (2001); Acute toxicity test with fresh water isopods (Asellus aquaticus) under semi-static conditions (14C)-Deltamethrin formulated as emulsifiable concentrate (25 g/L deltamethrin), Code: AE F032640; Springborn Labs (Europe) AG, Horn, Switzerland; Report No.: C015003; Document No.: M-199681-01-2; 58 p.	48258215	264	OWN	M-199681-01-2 / TEP	
850.1025	Dionne, E. (1990) Acute Toxicity of Deltamethrin-Active Ingredient to Eastern Oyster (Crassostrea virginica) under Flow through Conditions: Lab Project Number: 89-11-3148: 1719.0889.6122.504: 89-0153. Unpublished study prepared by Springborn Laboratories, Inc. 61 p.	41651016	264	OWN		
850.1025	Dionne, E. (1993) HR 20900--Acute Toxicity to Eastern Oyster (Crassostrea virginica) Under Flow-through Conditions: Lab Project Number: 1719.1092.6213.504: 93-2-4646. Unpublished study prepared by Springborn Labs, Inc. 66 p.	43073907	264	OWN		
850.1025	Fischer, R.; Schupner, J. (1995) Supplement 1 to: HR 20900--Acute Toxicity to Eastern Oyster (Crassostrea virginica (sic))Under Flow-Through Conditions: Lab Project Number: 93-2-4646. Unpublished study prepared by Springborn Labs, Inc. 17 p.	43821101	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 10 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.1025	Dionne, E. (1990) Acute Toxicity of Decis 2.5 EC (IS-002A) to Eastern Oysters (Crassostrea virginica) under Flow-through Conditions: Lab Project Number: SLI 90-1-3214: 1719.0889.6123.504: 89-0175. Unpublished study prepared by Springborn Laboratories, Inc. 51 p	41651017	264	OWN	TEP	
850.1035	Bettencourt, M. (1993) HR 20900-Acute Toxicity to Mysid Shrimp (Mysidopsis bahia) Under Flow-through Conditions: Lab Project Number: 1719.1092.6212.515: 93-11-5056. Unpublished study prepared by Springborn Labs, Inc. 83 p.	43073908	264	OWN		
850.1035	Lelievre, M. (1991) Deltamethrin: Acute Toxicity to Mysid Shrimp (Mysidopsis bahia) under Static Renewal Conditions: Lab Project Number: 91-7-3826: 1719.0889.6120.510. Unpublished study prepared by Springborn Labs, Inc. 49 p.	42114810	264	OWN		
850.1035	Lelievre, M. (1991) (IS-002A): Acute Toxicity to Mysid Shrimp (Mysidopsis bahia) under Static Renewal Conditions: Lab Project Number: 91-3-3681; 1719.0889.6121.510. Unpublished study prepared by Springborn Labs, Inc. 54 p.	42114812	264	OWN		
850.1075	McAllister, W.; Swigert, J.; Bowman, J. (1986) Acute Toxicity of Deltamethrin to Bluegill Sunfish (Lepomis macrochirus): Static Acute Toxicity Report #33980. Unpublished study prepared by Analytical Bio-Chemistry Laboratories, Inc. 47 p.	00158275	264	OWN		
850.1075	Bettencourt, M. (1993) HR 20900-Acute Toxicity to Bluegill Sunfish (Lepomis macrochirus) Under Flow-through Conditions: Lab Project Number: 1719.1092.6210.105: 93-3-4669. Unpublished study prepared by Springborn Labs, Inc. 67 p.	43073903	264	OWN		
850.1075	Sousa, J. (1990) Acute Toxicity of Decis 2.5 EC (IS-002A) to Bluegill (Lepomis macrochirus) under Flow-through Conditions: Lab Project Number: 1719.0889.6113.105. Unpublished study prepared by Springborn Laboratories, Inc. 60 p.	41651012	264	OWN	TEP	
850.1075	McAllister, W.; Bowman, J. (1986) Acute Toxicity of Deltamethrin to Rainbow Trout (Salmo gairdneri): Static Acute Toxicity Report #33981. Unpublished study prepared by Analytical Bio-Chemistry Laboratories, Inc. 53 p.	00158274	264	OWN		
850.1075	Sousa, J. V. (1990); (LX 165-08, deltamethrin technical) - Acute (28-Day) toxicity to rainbow trout (Oncorhynchus mykiss) under flow-through conditions; Bionomics Laboratories; Report No.: A47111 ; Document No.: M-135553-01-2; 56 p.	48393201	264	OWN		M-135553-01-2
850.1075	Sowig, P., et al, (2001); Acute toxicity to Oncorhynchus mykiss (rainbow trout) AE F108565 (metabolite of deltamethrin) substance, pure, Code: AE F108565 00 1B99 0001 ;Aventis CropScience GmbH, Frankfurt am Main, Germany; Report No. : C010902; Document No.: M-199816-01-2; 32 p.	48268209	264	OWN		M-199816-01-2

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 11 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.1075	Dorgerloh, M. (2008); Acute toxicity of deltamethrin EC 25 G (Decis FLUXX) to fish (Oncorhynchus mykiss) under static conditions: Bayer CropScience AG, Monheim, Germany; Report Number: EbIDX029; Document No.: M-312125-01-2; 76 p.	48258207	264	OWN	M-312125-01-2 / TEP	
850.1075	Sousa, J. (1990) Acute Toxicity of Decis 2.5 EC (IS-002A) to Rainbow Trout (Oncorhynchus mykiss) under Flow-through Conditions: Lab Project Number: SLI 90-04-3281: 1719.0789.6112.108: 89-0139. Unpublished study prepared by Springborn Laboratories, Inc. 58 p.	41651013	264	OWN	TEP	
850.1075	Bettencourt, M. (1993) HR 20900-Acute Toxicity to Rainbow Trout (Oncorhynchus mykiss) Under Flow-through Conditions: Lab Project Number: 1719.1092.6211.108: 93-4-4723. Unpublished study prepared by Springborn Labs, Inc. 68 p.	43073904	264	OWN		
850.1075	Sousa, J. (1990) Acute Toxicity of Deltamethrin-Active Ingredient to Sheepshead Minnow (Cyprinodon variegatus) under Flow-through Conditions: Lab Project Number: 90-01-3190: 1719.0889.6118.505: 89-0151. Unpublished study prepared by Springborn Labs, Inc. 54 p.	41651015	264	OWN		
850.1075	Bettencourt, M. (1993) HR 20900-Acute Toxicity to Sheepshead (Cyprinodon variegatus) Under Flow-through Conditions: Lab Project Number: 1719.1092.6214.505: 93-4-4739. Unpublished study prepared by Springborn Labs, Inc. 68 p.	43073906	264	OWN		
850.1075	Lelievre, M. (1991) (IS-002A): Acute Toxicity to Sheepshead Minnow under (Cyprinodon variegatus) Static Conditions: Lab Project Number: 91-23668: 1719.0889.6119.500. Unpublished study prepared by Springborn Labs, Inc. 55 p.	42114811	264	OWN		
850.1300	McNamara, P. (1991) Deltamethrin-The Chronic Toxicity to Daphnia magna under Flow-through Conditions: Lab Project Number: 90-06-3353: 1719.0889.6124.130. Unpublished study prepared by Springborn Labs, Inc. 70 p.	42114813	264	OWN		
850.1300	McNamara, P. (1994) (Deltamethrin)-The Chronic Toxicity to Daphnia magna Under Flow-Through Conditions: Raw Data: Supplement to Study MRID #42114813: Lab Project Number: 90-06-3353: 1719.0889.6124.130. Unpublished study prepared by Springborn Labs., Inc. 224 p.	43208801	264	OWN		
850.1350	Claude, M. et al (2012); Deltamethrin: A Flow-Through Life-Cycle Toxicity Test with the Saltwater Mysid (Americamysis bahia), OPPTS 850.1350, Wildlife International, Ltd., Easton, MD, Laboratory Project ID 149A-245A (M-437923-01-1), 133 pages	48988202	264	OWN	M-437923-01-1 / Submitted to PRD on 11/05/12. PRD Contact is Joel Wolf.	
850.1400	Banman, C. et al (2012); Early Life Stage Toxicity of Deltamethrin Technical to the Sheepshead Minnow (Cyprinodon variegatus) Under Flow-Through Conditions, OPPTS 850.1400, Bayer CropScience, Stilwell, KS, Laboratory Project ID EBDAL085 (M-439783-01-1), 114 pages	48988203	264	OWN	M-439783-01-1 / Submitted to PRD on 11/05/12. PRD Contact is Joel Wolf.	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 12 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.1400	Sousa, J. (1991) Deltamethrin: Toxicity Test with Fathead Minnow (Pimephales promelas) Embryos and Larvae: Lab Project Number 90-11-3353: 1719.0889.6125.120. Unpublished study prepared by Springborn Labs, Inc. 70 p	42114814	264	OWN		
850.1500	Dionne, E. (1993) Deltamethrin: The Chronic Toxicity to the Fathead Minnow (Pimephales promelas) During a Full Life-Cycle Exposure: Lab Project Number: 1719.0891.6187.122: 93-1-4607. Unpublished study prepared by Springborn Labs, Inc. 450 p.	42786801	264	OWN		
850.1730	Fackler, P. (1990) Deltamethrin: Bioconcentration and Elimination of Carbon 14 -Residues by Bluegill (Lepomis macrochirus): Lab Project Number: SLI 89-11-3143: 1719 0789 6115 140. Unpublished study prepared by Springborn Laboratories, Inc. 55 p.	41651040	264	OWN		
850.1730	Schocken, M. (1993) Deltamethrin-Bioconcentration Exposure with Bluegill Sunfish (Lepomis macrochirus) and Identification of Resulting Metabolites: Lab Project Number: 1719.0393.6231.140: #93-11-5038: 93-0017. Unpublished study prepared by Springborn Laboratories, Inc. 82 p.	43072701	264	OWN		
850.1730	Fischer, R. (1993) Deltamethrin-Bioaccumulation in Fish Metabolite Identification Status Report: Lab Project Number: ECOFI.385. Unpublished study prepared by Hoechst-Roussel Agri-Vet Co. 6 p.	42976502	264	OWN		
850.1730	Schocken, M. (1993) Deltamethrin-Bioconcentration Exposure with Bluegill Sunfish (Lepomis macrochirus) and Identification of Resulting Metabolites: Lab Project Number: 1719.0393.6231.140: #93-11-5038: 93-0017. Unpublished study prepared by Springborn Laboratories, Inc. 82 p.	43072701	264	OWN		
850.1730	Fischer, R. (1993) Deltamethrin-Bioaccumulation in Fish Metabolite Identification Status Report: Lab Project Number: ECOFI.385. Unpublished study prepared by Hoechst-Roussel Agri-Vet Co. 6 p.	43072702	264	OWN		
850.1730	Fackler, P. (1992) Supplemental Information to the Study "(Deltamethrin)-Biocentration and Elimination of [Carbon 14-residues by Bluegill (Lepomis macrochirus)]" (EPA MRID No. 41651040): Lab Project Number: 1719-0789-6115-140. Unpublished study prepared by Springborn Labs Inc. 13 p.	42475909	264	OWN		
850.1730	Schocken, M.; Grandy, K. (1993) Issues Related to Maintaining Consistent, Nominal Concentrations of Deltamethrin in Aquatic Toxicology and Bioconcentration Studies: Lab Project Number: 90-4-3307: 90-12-3597. Unpublished study prepared by Springborn Laboratories, Inc. 16 p.	43072702	264	OWN		
850.1735	Picard, C. (2013) 10-Day Toxicity Test Exposing Freshwater Amphipod s (Hyaella azteca) to Deltamethrin Applied to Sediment Under Static-Renewal Conditions. Project Number: 13656/6162. Unpublished study prepared by Smithers Viscient Laboratories. 84p.	49191302	64977	OWN	13656/6162 / Submitted by PWG	
850.2100	Shepherd, J. et al (2013); Toxicity of Deltamethrin Technical During an Acute Oral LD50 with the Canary (Serinus canaria), OPPTS 850.2100, SynTech Research Laboratory Services LLC. Stilwell, KA, Study Number EBDAL083 (M-444452-01-1), 45 pages	49058501	264	OWN	M-444452-01-1 / Submitted to PRD on 2/15/13. Contact is Joel Wolf.	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

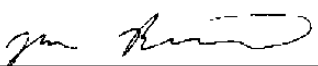
Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 13 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.2100	Ross, D.B.; Roberts, N.L.; Cameron, M.M.; et al. (1978) RU 22974 (Decamethrin): LD50 Determination and Assessment of Neurotoxicity in the Domestic Hen: RSL 293-NT/7830/A. (Unpublished study received Mar 25, 1982 under 2E2663; prepared by Huntingdon Research Centre, England, submitted by American Hoechst Corp., Somerville, N.J.; CDL:070735-G)	00098094	264	OWN		
850.2100	Beavers, J. (1986) Deltamethrin: An Acute Oral Toxicity Study with the Bobwhite: Final Report: Project No. 125-131. Unpublished study prepared by Wildlife International Ltd. 15 p.	00158273	264	OWN		
850.2200	Acute Avian Diet, Quail			WAIVE	Study requirement waived	
850.2200	Fink, R.; Beavers, J.B. (1977) Final Report: Eight-Day Dietary LC50-Mallard Duck: Project No. 125-108. (Unpublished study received Dec 28, 1977 under 279-EX-68; prepared by Wildlife International, Ltd., submitted by FMC Corp., Philadelphia, Pa.; CDL: 232536-I)	00060723	264	OWN		
850.2300	Beavers, J.; Lattin, A.; Smith, G. et al. (1991) Deltamethrin: A One-Generation Reproduction Study with the Northern Bobwhite (Colinus virginianus): Lab Project Number: 125-147. Unpublished study prepared by Wildlife Int. Ltd. 36 p.	42114808	264	OWN		
850.2300	Beavers, J. et al. (1991) Deltamethrin: A One-Generation Reproduction Study with the Mallard (Anas platyrhynchos): Lab Project ID: 125-148. Unpub. Study prepared by Wildlife Int. Ltd. 36 p.	42114809	264	OWN		
850.3020	Hoxter, K.; Lynn, S. (1991) Deltamethrin Technical: An Acute Contact Toxicity Study with the Honey Bee: Lab Project Number: 125-151B. Unpublished study prepared by Wildlife International Ltd. 16 p.	42114815	264	OWN		
850.3030	Mayer, D. (1992) Deltamethrin/ Honey Bees Toxicity of Residues on Foliage: Lab Project Number: WSU 92-003. Unpublished study prepared by Washington State University. 54 p.	42773902	264	OWN		
850.3040	Atkins, E.; Kellum, D.; Neuman, K. (1976) Effects of Pesticides on Apiculture [1976 Annual Report]: Lab Project Number: 1499. Unpublished study prepared by University of Calif. Riverside. 36 p.	42475905	264	OWN		
850.4100	Nguyen, D. H., et al. (2003); Non-target terrestrial plants: An evaluation of the effects of Decis EC 025 in the seedling emergence and growth test (Tier I) Decis EC25 g/L Code: AE F032640 00 EC03 B021; Bayer CropScience GmbH, Frankfurt am Main, Germany; Report No.: C036125; Document No.: M-220012-01-2; 16 p.	48258210	264	OWN	M-220012-01-2	
850.4150	Nguyen, D. H., et al. (2003); Non-target terrestrial plants: An evaluation of the effects of Decis EC 025 in the vegetative vigor test (Tier I) Decis EC25 g/L Code: AE F032640 00 EC03 B021; Bayer CropScience GmbH, Frankfurt am Main, Germany; Report No.: C036126; Document No.: M-220015-01-2; 15 p.	48258211	264	OWN	M-220015-01-2	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.		Agency
Internal Use Copy		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 14 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.4400	Banman, C. Et Al (2012); Toxicity Of Deltamethrin Technical To The Duckweed (<i>Lemna Gibba</i> G3) Under Static-Renewal Conditions, Bayer CropScience, Stilwell, KS, Laboratory Project ID EBDAL089 (M-439085-01-1), 68 Pages	48988204	264	OWN	M-439085-01-1 / Submitted To PRD On 11/05/12. PRD Contact Is Joel Wolf.	
850.4500	Banman, C. et al (2013); Toxicity of Deltamethrin Technical to the Saltwater Diatom <i>Skeletonema costatum</i> During a 96 Hour Exposure, Study ID 7SRLS13C39, Activity ID EBDAL098, Unpublished study prepared by SynTech Research Laboratory Services, 73 p.	49263801	264	OWN	M-468465-01-1 / EBDAL098 / 7SRLS13C39 / Submitted to PRD, Joel Wolf on 11/26/13.	
850.4500	Banman, C. et al (2013); Toxicity of Deltamethrin Technical to the Freshwater Diatom <i>Navicula pelliculosa</i> During a 96 Hour Exposure, Study ID 7SRLS13C37, Activity ID EBDAL097, Unpublished study prepared by SynTech Research Laboratory Services, 71 p.	49263802	264	OWN	M-468384-01-1 / EBDAL097 / 7SRLS13C37 / Submitted to PRD, Joel Wolf on 11/26/13.	
850.4550	Banman, C. et al (2013); Toxicity of Deltamethrin Technical to the Cyanobacterium <i>Anabaena flos-aquae</i> During a 96 Hour Exposure, Study ID 7SRLS13C38, Activity ID EBDAL096, Unpublished study prepared by SynTech Research Laboratory Services, 72 p.	49263803	264	OWN	M-468386-01-1 / EBDAL096 / 7SRLS13C38 / Submitted to PRD, Joel Wolf on 11/26/13.	
850.5400	Hoberg, J. R., (1992); Deltamethrin technical: Toxicity to the freshwater green alga, <i>Chlorella vulgaris</i> ; Springborn Labs, Inc. (SLS), USA; Report No.: A 70905; Document No.: M-149389-01-2; 48 p.	48258213	264	OWN	M-149389-01-2	
850.5400	Giddings, J. (1990) Deltamethrin: LX165-08 (Deltamethrin Technical), Toxicity to the Freshwater Green Alga <i>Selenastrum capricornutum</i> : Lab Project Number: A47090. Unpublished study prepared by Springborn Labs., Inc. 40 p.	44977003	264	OWN		
850.5400	Giddings, J. (1990) Deltamethrin: LX165-09 (Deltamethrin IS-002A): Toxicity to the Freshwater Green Alga <i>Selenastrum capricornutum</i> : Lab Project Number: A47092. Unpublished study prepared by Springborn Labs., Inc. 41 p.	44977004	264	OWN		
850.5400	Vukich, J. (1995) Letter sent to Office of Pesticide Programs dated July 21, 1995: Summary of results of a study on the toxicity of DECIS 0.2 EC to the freshwater alga <i>Selenastrum capricornutum</i> . Prepared by AgrEvo USA Co. 2 p.	43741301	264	OWN	TEP	
850.5400	Heusel, R. (1994); The Effect of deltamethrin – water miscible suspension concentrate 50 g/L (Hoe 032640 00 SC05 A204) to <i>Scenedesmus subspicatus</i> CHODAT (Green alga) in a Growth Inhibition Test (method OECD); Hoechst AG, Frankfurt am Main, Germany; Report No.: A52601 ; Document No.: M-133411-01-2; 44 p.	48258212	264	OWN	M-133411-01-2 / TEP	
850.5400	Sowig, P., et al (2000); Algal growth inhibition – <i>Pseudokirchneriella subcapitata</i> Deltamethrin emulsifiable concentrate 100 g/L; Code : AE F032640 00 EC11 A308; Aventis CropScience GmbH, Frankfurt am Main, Germany; Report No.: C007531; Document No.: M-196114-01-2; 40 p.	48258214	264	OWN	M-196114-01-2 / TEP	

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 15 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
850.6100	Vincent, T. (2013); Independent Laboratory Validation Of "Analytical Method 00877 For The Determination Of Total Residues Of Deltamethrin (AE F032640) In/On Soil And Sediment By HPLC-MS/MS With Modification Signed 07/15/13" ; BCS Study No. MEDAL039, ABC Study No. 80406; Unpublished study prepared by ABC Laboratories, Inc. 121 p.	49263804	264	OWN	M-467493-01-1 / MEDAL039 / 80406	
850.6100	Clark, S. (2014) Laboratory Validation: Validation of Residue Analytical Method: "Determination of Bifenthrin, Cypermethrin, Cyfluthrin, Deltamethrin, Esfenvalerate, Fenpropathrin, Lambda-Cyhalothrin and Permethrin in Wastewater Treatment Biosolids."; Final Report. Project Number: 69211, METH/213/REVISION/2, 1149. Unpublished study prepared by Morse Laboratories, Inc. 292p.	49310902	64977	OWN	69211 / METH/213/REVISION/2, 1149	
850.6100	Mason, B. (2014) Laboratory Validation: Validation of Residue Analytical Method: "Determination of Bifenthrin, Cypermethrin, Cyfluthrin, Deltamethrin, Esfenvalerate, Fenpropathrin, Lambda-Cyhalothrin and Permethrin in Wastewater (Influent and Effluent)."; Final Report. Project Number: 69210, METH/201/REVISION/3, 1149. Unpublished study prepared by Morse Laboratories, Inc. 410p.	49310901	64977	OWN	69210 / METH/201/REVISION/3, 1149	
850.6100	Patel, D. et al (2013); Independent Laboratory Validation (ILV) of the BAYER Method 00866/M001: Modification M001 of Analytical Method 00886 for the Determination of Total Residues of Deltamethrin (AE F032640) in Surface Water by HPLC-MS/MS. BCS Study No. MEDAL040, ADPEN Study No. 2K13-982; Unpublished study prepared by ADPEN Laboratories; 97 p.	49263805	264	OWN	M-470061-01-1 / MEDAL040 / 2K13-982	
850.SUPP	Picard, C.R. (2013); Life-Cycle Toxicity Test Exposing Midges (Chironomus dilutus) to Deltamethrin Applied to Sediment Under Static-Renewal Conditions Following EPA Test Methods; Lab Project ID 13798.6301; Unpublished study prepared by Smithers Viscient Laboratories; 131p.	49263806	432	OWN	M-466314-01-1 / EBDAL086 / 13798.6301 / Submitted to PRD (Joel Wolf) 11/13.	
850.SUPP	Picard, C.R. (2013); 42-Day Toxicity Test Exposing Freshwater Amphipods (Hyaella azteca) to Deltamethrin Applied to Sediment Under Static-Renewal Conditions Following EPA Test Methods; Lab Project ID 13798.6302; Unpublished study prepared by Smithers Viscient Laboratories; 93p	49263807	432	OWN	M-466332-01-1 / EBDAL088 / 13798.6302 / Submitted to PRD (Joel Wolf) 11/13.	
Residue Chemistry, Section 158.1410						
860.1460	Silvoy, J. (1993) Determination of Residues Resulting from a Single Application of LX1217-04 (K-Othrine SC 5.0) as a General Surface, Crack and Crevice, and Spot Treatment Spray in Simulated Food Processing, Service, and Manufacturing Areas: Lab Project Number: 91-0064: 1714-91-217-04-21S-01. Unpublished study prepared by Landis International, Inc. 186 p.	43340801	432	OWN	91-0064	
860.1850	Erstfeld, K.; Larson, J.; Lange, B. (1991) C-14 Deltamethrin: Confined Accumulation in Rotational Crops--30 and 120 Day Experiments: Lab Project Number: 89-0101: EF-89-30: HLA 6187-114. Unpublished study prepared by Pan-Agricultural Labs, Inc. and Hazleton Labs, Inc. 311 p.	42114823	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 16 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
860.1850	Larson, J. (1994) Supplement to the Report (Amendment): (carbon 14)-Deltamethrin: Confined Accumulation in Rotational Crops: 30-Day Experiment (Analytical Phase): Lab Project Number: HLA/6187/114. Unpublished study prepared by Hazleton Laboratories America, Inc. 5 p.	43236703	264	OWN		
Toxicology, Section 158.340						
870 Series	Dulak, L. (1991) Summary of Toxicity of Deltamethrin Technical Active and Decis 2.5E...Insecticide. Unpublished study prepared by Hoechst-Roussel Agri-Vet Co. 8 p.	42114806	264	OWN		
870.1100	Myer, J. (1989) Acute Oral Toxicity Study of Deltamethrin in Rats: Lab Project Number: 327-122: 88-0126. Unpublished study prepared by International Research and Development Corp. 13 p.	41651019	264	OWN		
870.1200	Myer, J. (1989) Acute Dermal Toxicity Study of Deltamethrin in Rabbits: Lab Project Number: 327-123: 88-0127. Unpublished study prepared by International Research and Development Corp. 14 p.	41651020	264	OWN		
870.1300	Ulrich, C. (1990) Acute Inhalation Toxicity Evaluation of Deltamethrin in Rats: Lab Project Number: 327-121. Unpublished study prepared by International Research and Development Corp. 49 p.	41651021	264	OWN		
870.2400	Myer, J. (1989) Eye Irritation Study of Deltamethrin in Rabbits: Lab Project Number: 327-125. Unpublished study prepared by International R&D Corp. 14 p.	41651022	264	OWN		
870.2500	Myer, J. (1989) Primary Dermal Irritation Test of Deltamethrin in Rabbits: Lab Project Number: 327-124. Unpublished study prepared by International R&D Corp. 14 p.	41651023	264	OWN		
870.2600	Myer, J. (1989) Dermal Sensitization Study of Deltamethrin in the Albino Guinea Pig (Buehler): Lab Project Nr: 327-126. Unpublished study prepared by International R&D Corp. 22 p.	41651024	264	OWN		
870.3150	Ryle, P.; Path, R.; Path, M. et al. (1993) Deltamethrin: Toxicity to Dogs by Repeated Oral Administration for 52 Weeks: Lab Project Number: RSL 816/920929. Unpublished study prepared by Huntingdon Research Centre, Ltd. 236 p.	44372601	264	OWN		
870.3200	Siglin, J. (1993) 21-Day Dermal Toxicity Study in Rats with Deltamethrin Technical: Lab Project Number: 3207.28. Unpublished study prepared by Springborn Labs., Inc. 214 p.	42773901	264	OWN		
870.3700	Schardein, J. (1990) Developmental Toxicity Study of Deltamethrin in Rats: Lab Project Number: 327-120. Unpublished study prepared by International Research and Development Corp. 140 p.	41651025	264	OWN		
870.3700	Schardein, J. (1990) Developmental Toxicity Study of Deltamethrin in New Zealand White Rabbits: Lab Project Number: 327-112. Unpub. study prepared by International Research and Development Corp. 91 p.	41651026	264	OWN		
870.3700	Abdel-Khalik, M.; Hanafy, M.; Abdel-Aziz, M. (1993) Studies on the teratogenic effects of Deltamethrin in rats. Dtsch. tierärztl. Wschr. 100:142-143.	43854001	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014		EPA Reg. No.: 432-RLGU	Page 17 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709		Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]			

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
870.3700	Richard, J. (2001) Deltamethrin: Prenatal Developmental Toxicity Study by Oral Route (Gavage) in Rabbits: Lab Project Number: 21559 RSL. Unpublished study prepared by CIT. 309 p.	45881901	264	OWN		
870.SUPP	Richard, J. (2001) Range Finding Study of Prenatal Development Toxicity by Oral Route (Gavage) in Rabbits: Study Number 21558 RSL. Unpublished study prepared by CIT. 120 p.	49329702	264	OWN	M-204106-01- 2	21558 RSL / Submitting with matrix
870.3800	Abd El-Aziz, M.; Sahlab, A.; Abd El-Khalik, M. (1994) Influence of diazinon and deltamethrine on reproductive organs and fertility of male rats. Dtsch. tieraerztl. Wschr. 101:230-232.	43854002	264	OWN		
870.3800	Hoberman, A. (1992) Deltamethrin: Reproductive Effects of Deltamethrin Administered Orally in the Diet to Cr1: CDBR VAF/Plus Rats for Two Generations: Lab Project Number: 818-001: A70863: ARGUS 818-001. Unpublished study prepared by Argus Research Labs., Inc. 1029 p.	44398101	264	OWN		
870.4200	Richard, J. (1995) Deltamethrin: 97-Week Carcinogenicity Study by Oral Route (Dietary Admixture) in Mice: Lab Project Number: 7347 TCS: A70820: 7347TCS/ DELTAMETHRIN. Unpublished study prepared by Centre International de Toxicologie (C.I.T.).2041 p.	44372602	264	OWN		
870.SUPP	Fabreguettes, C. (1990) Toxicity Study for 12 weeks by Oral Administration to Mice, Test Substance Deltamethrin: Study No. 5566 TSS. Unpublished study prepared by CIT. 292 p.	49329701	264	OWN	M-149360-01- 2	5566 TSS / Submitting with matrix
870.4300	Ryle, P. (1995) Deltamethrin: Potential Tumorigenic and Toxic Effects in Prolonged Dietary Administration to Rats: Lab Project Number: RSL 814: A70821: RSL 814/932275. Unpublished study prepared by Huntingdon Research Centre, Ltd. 3012 p.	44398102	264	OWN		
870.5100	Chantot, J.; Glomot, R.; Penasse, L. et al. (1980) Detection of Mutagenetic Potency of Decamethrin (RU 22974) Bacterial Tests: Lab Project Number: RU/TOX/80.21.01/A. Unpublished study prepared by Centre de Recherches Roussel-Uclaf. 31 p.	42475902	264	OWN		
870.5100	Fouillet, X. (1992) RU 22974 Mutagenicity Study of Various Preparations Salmonella Microsome Test: Lab Project Number: IFREB-R 761153/A. Unpublished study prepared by Institut Francaise de Recherches et Essais Biologiques. 12 p.	42475903	264	OWN		
870.5375	Putman, D.; Morris, M. (1989) Chromosome Aberration Assay of Deltamethrin in Chinese Hamster Ovary (CHO) Cells: Lab Project Number: T8418. 337003. Unpublished study prepared by Microbiological Associates, Inc. 29 p.	41651027	264	OWN		
870.5550	Curren, R. (1989) Unscheduled DNA Synthesis of Deltamethrin in Rat Primary Hepatocytes: Lab Project Number: T8418.380. Unpublished study prepared by Microbiological Associates, Inc. 27 p.	41651028	264	OWN		
870.5575	Mondino, A. (1979) Mutagenic Activity of the Product RU 22974 with Schizosaccharomyces pombe. Unpublished study prepared by Antoine Marxer RBM Institute of Biomedical Research. 20 p.	41651029	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 18 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
870.6200	Nemec, M. (1998) A Subchronic (13-Week) Neurotoxicity Study Of Deltamethrin in Rats: Final Report: Lab Project ID: WIL-274003: 53014. Unpub. study prepared by WIL Research Labs., Inc. 1509 p.	44557902	264	OWN		
870.6200	Nemec, M. (1998) An Acute Neurotoxicity Study Of Deltamethrin in Rats: Final Report: Lab Project Number: WIL-274002: WIL-99026: WIL-99034. Unpublished study prepared by WIL Research Labs., Inc. 1070 p.	44557901	264	OWN		
870.7485	Totis, M. (2009); Deltamethrin: Plasma kinetics study in the male rat by gavage. Bayer CropScience Study No. SA08235. Document No.: M-356672-0-2; 97 p.	48258216	264	OWN	M-356672-0-2	
870.7485	Vukich, J. (1996) Deltamethrin: Registrant Response to USEPA-HED Review of Ruminant Metabolism Data Submitted to Support Use of Deltamethrin on Animal Feed Commodities: Lab Project Number: D188179: 12846: 11376. Unpublished study prepared by AgrEvo USA Co. 28 p.	44372604	264	OWN		
870.7485	Bosch, A. (1990) Metabolism of ¹⁴ C-Deltamethrin in Rats: Lab Project Number: HLA 6187-108. Unpublished study prepared by Hazleton Labs America, Inc. 180 p.	41677401	264	OWN		
870.7600	Ampofo, S. (1995) Dermal Absorption of (carbon 14)-Deltamethrin in Male Rats (Preliminary and Definitive Phases): Final Report: Lab Project Number: HWI 6298-107: T94-122. Unpublished study prepared by Hazleton Wisconsin, Inc. 239 p.	43681701	264	OWN		
870.7800	Odin-Feurtet, M. (2012); Deltamethrin: 28 Day Immunotoxicity Study in the Female Sprague-Dawley Rat by Dietary Administration, OPPTS 870.7800, Bayer CropScience AG, Monheim, Germany, Laboratory Project ID TXDAL025 (M-428263-01-1), 191 pages	48988205	264	OWN	M-428263-01-1 / Submitted to PRD on 11/5/12. PRD Contact is Joel Wolf,	

Applicator Exposure / Risk Assessments

None	Dulak, L. (1992) Deltamethrin Technical and Decis 2.5EC (Code IS-002A) Insecticide EPA File Symbol 34147-T and Petition Number 2F4055 Applicant Response to the Toxicity Branch New Chemical Screen Dated June 18, 1992. Unpublished study prepared by Hoechst-Roussel Agri-vet Co. 6 p.	42475901	264	OWN	
None	O'Grodnick, J. (1992) Deltamethrin Technical and Decis 2.5EC (Code IS-002A) Insecticide EPA File Symbol 34147-T and Petition Number 2F4055 Applicant Response to the Ecological Effects Branch New Chemical Screen Dated April 17, 1992. Unpublished study by Hoechst-Roussel Agri-vet Co. 6 p.	42475904	264	OWN	
None	Erstfeld, K. (1992) Deltamethrin Technical and Decis 2.5EC (Code IS-002A) Insecticide EPA File Symbol Number 34147-T and Petition Number 2F4055 Applicant Response to the Environmental Fate and Groundwater Branch: New Chemical Screen Received June 17, 1992 and EUP Review Dated April 10, 1992. Unpublished study prepared by Hoechst-Roussel Agri-vet Co. 19 p.	42475906	264	OWN	

Signature:

Name and Title: Jan Brill, Manager, Registration

Date: May 12, 2014

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460

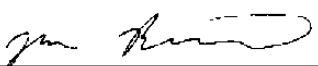
Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 19 of 20
Applicant's/Registrant's Name & Address	Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
None	Whitmyre, G. (1999) Deltamethrin: Risk Assessment of Mixer/Loader/Applicator Exposures Associated with Use of Decis 0.2 EC and Decis 1.5 EC: Lab Project Number: 9-01-RS.COM: B002614. Unpublished study prepared by risksciences.com, LLC. 58 p.	45029001	264	OWN		
None	Petersen, B.; Tomerlin, J. (1997) Synthetic Pyrethroids: Generic Methodology for Dietary Risk Assessment: Lab Project Number: PWG DUPONT 97-01. Unpublished study prepared by Novigen Sciences, Inc. 28 p.	44352901	264	OWN		
None	Petersen, B.; Tomerlin, J. (1997) Synthetic Pyrethroids: Generic Methodology for Dietary Risk Assessment: Lab Project Number: PWG AGREVO 97-01. Unpublished study prepared by Novigen Sciences, Inc. 28 p.	44353001	264	OWN		
None	Polakoff, B. (1997) Deltamethrin and Tralomethrin Chronic and Acute Dietary Exposure Analyses and Risk Assessments: Unpublished study prepared by Novigen Sciences, Inc. 103 p.	44353002	264	OWN	Lab Project Number: DELTAMETHRIN/ TRALOMETHRIN 97-01	
None	Driver, J.; Ginevan, M.; Milask, L.; et al. (1997) Synthetic Pyrethroids: Generic Methodology for Non-Dietary and Aggregate Risk Assessment: Lab Project Number: PWG-97-03. Unpublished study prepared by risksciences.com, L.L.C. 102 p.	44374001	264	OWN		
None	Driver, J.; Ginevan, M.; Milask, L.; et al. (1997) Deltamethrin & Tralomethrin: Non-Dietary and Aggregate Risk Assessment: Lab Project Number: DELTAMETHRIN/ TRALOMETHRIN 97-04. Unpublished study prepared by risksciences.com, L.L.C. 32 p.	44374002	264	OWN		
None	Driver, J.; Ginevan, M.; Milask, L.; et al. (1997) Synthetic Pyrethroids: Generic Methodology for Non-Dietary and Aggregate Risk Assessment: Lab Project Number: PWG-97-03. Unpublished study prepared by risksciences.com, L.L.C. 102 p.	44374901	264	OWN		
None	Driver, J.; Ginevan, M.; Milask, L. et al. (1997) Synthetic Pyrethroids: Generic Methodology for Non-Dietary and Aggregate Risk Assessment: Lab Project Number: PWG-97-03. Unpublished study prepared by risksciences.com, L.L.C. 102 p.	44375402	264	OWN		
None	Driver, J.; Ginevan, M.; Milask, L. et al. (1997) Methods for Assessing Potential Non-Dietary Exposures to Synthetic Pyrethroids: Stochastic Case Study for Indoor Total Release Foggers & Fumigators: Lab Project Nr: PWG-97-04. Unpub. study prepared by risksciences.com, L.L.C. 61 p.	44393601	264	OWN		
None	Soderlund, D.; Clark, J.; Mullin, L. et al. (2000) Pyrethroid Insecticides: Is there a Common Mechanism of Mammalian Toxicity?: Lab Project Number: PWG FQPA 2000-01. Unpublished study prepared by PWG. 144 p.	45245501	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.		Agency
Internal Use Copy		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
401 M Street, S.W.
WASHINGTON, D.C. 20460


Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and .025 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: May 12, 2014	EPA Reg. No.: 432-RLGU	Page 20 of 20
Applicant's/Registrant's Name & Address Bayer CropScience P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709	Product: BES0668 Insecticide	
Ingredient: Deltamethrin, CAS No. = [52918-63-5]		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
					Report Number	Description
None	Travis, K. (1997) A Modified Tier II Aquatic Exposure Analysis of Cotton Pyrethroids, Incorporating Landscape-Level Exposure Factors: Lab Project Number: PYRETHROIDS3. Unpublished study prepared by Zeneca Agrochemical (Zeneca Ltd). 221 p.	44396502	264	OWN		
None	Giddings, J. (1997) Aquatic Mesocosm and Field Studies with Cotton Pyrethroids: Observed Effects and Their Ecological Significance: Lab Project Number: 97-6-7014: 13656.0497.6100.900. Unpublished study prepared by Springborn Labs., Inc. 102 p.	44396503	264	OWN		
None	Ritter, A.; Williams, W.; Cheplick, J. (1997) Tier 1 and Tier 2: Modeling of Pyrethroid Exposure to Aquatic Nontarget Organisms Associated with Use on Cotton: Lab Project Number: WEI 794.01: PWG. Unpublished study prepared by Waterborne Environmental, Inc. (WEI). 80 p.	44396504	264	OWN		
None	Gaston, C.; Walls, C. (1999) Deltamethrin Dietary, Non-Dietary, Drinking Water and Aggregate Risk Assessments: Lab Project Number: 99-01: B002625. Unpublished study prepared by Novigen Sciences, Inc. 139 p.	44977002	264	OWN		

Signature: 	Name and Title: Jan Brill, Manager, Registration	Date: May 12, 2014
--	--	--------------------

EPA Form 8570-35 (9-97) Electronic Paper versions available. Submit only Paper version.

Internal Use Copy

Agency